

REMARKS

Claims 15-21 are now present in this application.

Claim 15 has been amended, and claims 1-14 have been cancelled without prejudice or disclaimer. Reconsideration of the application, as amended, is respectfully requested.

Rejection under 35 USC 112

Claims 15-21 stand rejected under 35 USC 112, second paragraph. This rejection is respectfully traversed.

The Examiner indicates that “depositing a layer of material with a planar surface substantially the same as the conductive layer over the conductive layer” renders claim 1 indefinite. In view of the foregoing amendments, it is respectfully submitted that all claims particularly point out and distinctly claim the subject matter of the instant invention. Reconsideration and withdrawal of the 35 USC 112, second paragraph rejection are respectfully requested.

Rejections Under 35 USC 102(e) and 103

Claims 15-20 stand rejected under 35 USC 102(e) as being unpatentable over Hsu et al., U.S. Publication 2004/0067640.

Claim 21 stands rejected under 35 USC 103 as being unpatentable over Hsu et al. in view of Gotkis et al., U.S. Publication 2004/0058620.

The Examiner asserts that Hsu discloses the second copper layer 28B having a planar surface. However, independent claim 15 of the present application recites (emphasis added):

15. A CMP rework method, comprising the steps of:
providing a semiconductor substrate which has a patterned dielectric layer, a barrier layer over the patterned dielectric layer, and a conductive layer over the barrier layer;
performing a first CMP process to remove part of the conductive layer;
depositing a layer of material substantially the same as the conductive layer over the conductive layer, *wherein an entire upper surface of the layer of material is planar*; and
performing a second CMP process to expose the patterned dielectric layer.

It is clear that the CMP rework method in independent claim 15 comprises depositing a layer of material substantially the same as the conductive layer over the conductive layer. Moreover, an entire upper surface of the layer of material is planar.

However, as can be seen in Fig. 1E of Hsu, Hsu discloses that the second copper layer 28B, deposited on the first copper layer 28A, has a recess in an upper surface. Clearly, the entire upper surface of the second copper layer 28B is not planar. Accordingly, it is respectfully submitted that the CMP rework method of the present application is different from the CMP rework method of Hsu. The secondary reference to Gotkis et al. fails to overcome the deficiencies of the primary reference. Accordingly, the prior art utilized by the Examiner fails to teach or suggest the method of independent claim 15 and its dependent claims. Reconsideration and withdrawal of the 35 USC 102(e) and 103 rejections are respectfully requested.

Conclusion

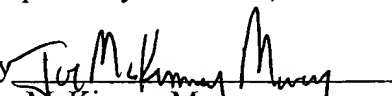
Favorable reconsideration and an early Notice of Allowance are earnestly solicited.

In the event that any outstanding matters remain in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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